

## ABSTRACT

A single-user detection method operates to reduce the effects of interference in multi-user detection systems. Based upon a number of received user codes, a receiver defines a frame of symbols containing at least one window. A symbol amplitude of a single-user in a multi-user system is approximated over the window of the frame and a perturbative correction value is calculated based upon a correlation or decorrelation matrix, which is determined by the delay spread of the signals. An estimation of the symbol amplitude of the single-user signal is calculated over one or a number of windows of the frame. The single-user signal is detected when the symbol amplitudes of the entire signal within the frame has been calculated.

ABSTRACT OF THE DISCLOSURE  
This document is a summary of the  
disclosure of the invention and is  
not intended to be a full and complete  
description of the invention. The  
disclosure of the invention is set forth  
in the following description and in the  
claims.